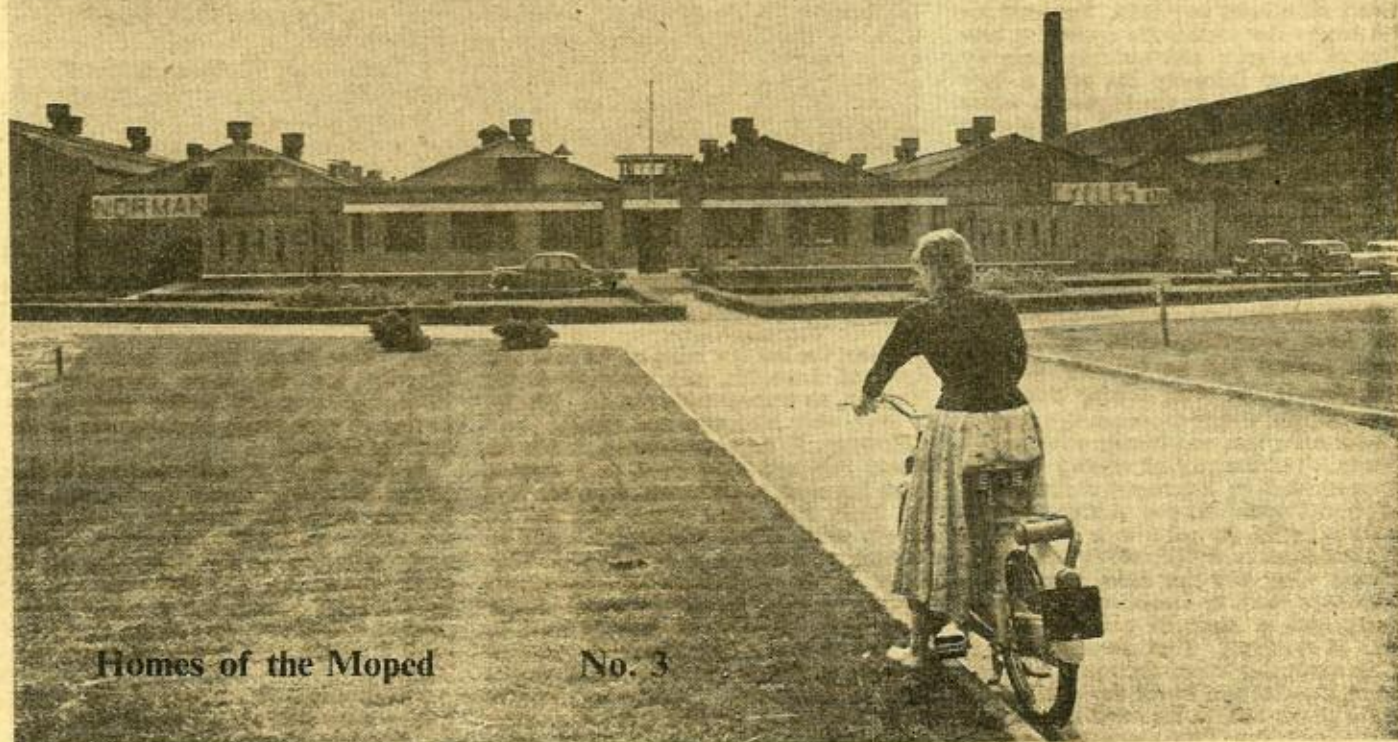


NORMAN



Homes of the Moped

No. 3

A VISIT TO A WELL-KNOWN KENTISH FACTORY DESCRIBED BY JOHN THORPE

THE Kentish town of Ashford can boast of many things. There is, for example, the most famous railway works in the south. Near the High-street stands a 1916 tank thinly disguised as an electricity transformer station. Ashford has a market serving the rich agricultural area which surrounds it—the rolling fields and tidy orchards of Kent. One of its ancient inns—the “George”—boasts a licensee who is a connoisseur of whisky, and who has been known to offer up to 40 brands of pure malt-distilled Scotch from one tiny bar. And there is the Norman factory, set in its well-kept grounds, with lawns as the advance-guard to its trim, unspotted buildings.

Covering an area of 160,000 square feet and employing some 450 people, Norman Cycles, Ltd., was one of the very first of Britain's factories to grasp the significance of the marriage of pedal and power. Before the war, they had been amongst the pioneers in the autocycle field, and this line they carried on in post-war days, along with a more-than-respect-

able production of cycles, and the building of high-quality lightweight motor-cycles. In 1954 it was decided to produce the Continental-based Norman “Nippy” moped, and plans were made to permit of a daily production in the order of 40 to 60 machines.

This was an entirely new line for the company, which had been founded as a frame-building, enamelling and plating business before the 1914-18 War by C. T. Norman. True, the inter-war years had seen the Kent Plating and Enamelling Company (re-formed from the original business by C. T. Norman and his brother “F. G.” in 1920) going from strength to strength, culminating in the building of the new factory at Beaver Road in 1935, when it became Norman Cycles, Ltd. True, there were years of know-how behind them. But here they were dealing with different processes . . . frames welded-up from stampings, for instance . . . and it is not surprising that at first the decision was to import a number of parts, rather than make them on the spot.



Practical test that “it goes”—a Norman “Nippy” on the rollers.

Years of production experience have altered that, and when I visited the factory a few weeks ago it was to see a line of presses, looking as neat as a squad of Marines on parade, producing frames. There was the fully automatic electrostatic spraying plant, too, one of the first of its type to be adopted by a British moped factory, which has done service now for several years; and in the very atmosphere was a feeling of quiet confidence in a job already well done, and destined to be improved upon into the bargain!

Mopeds share the production line with motor-cycles. As parts come through from the main engineering shop . . . arranged on the "open" plan, with various groups all working under the one roof . . . they are pre-assembled into handy units. Wheels, for instance, come to the line with tyres and tubes in place; the brakes fitted, and the rear sprocket bolted on. The headlamp-horn-speedometer cowling is assembled on an adjacent bench ready for fitting as one unit, and twist-grips are fitted to the handlebars in the same way.

A five-man production line is normally employed, though this can be boosted to an eight-man line when delays have to be made good, or a special order hurried through. At such times, too, the normal 44-hour week goes overboard, and overtime is worked.

Unlike the highly mechanized foreign factories, Normans depend to a large extent on the manual skill of their craftsmen. There is, true enough, an efficient power-tool set-up. This is mainly pneumatic, with air-tools plugged into the compressor system, which is

piped throughout the factory. The main compressor is situated near the spraying plant, and supplies air for that as well.

I arrived in time to watch moped frame NN 5500 begin its journey through the line. It had already been welded together, and had passed through the paint shop. Now here it was, resplendent in duo-tone blue and gold, ready to become a moped.

The first operator picked it up, and with the aid of pre-set tools faced the head lug, reamed the seat tube, and pressed in the head-race seatings. Then the fuel-tap threads were cleaned and tap screwed on. Three other frames were similarly prepared so that a batch of four was ready to go, and NN5500 took its place on the slowly moving belt. First additions were the rear-suspension units, followed by the fuel line. The pedalling-cranks were fitted to the engine, which was then offered up, the nuts on the right-hand side of the fixing studs having been fitted in a predetermined position, while on the bench. On went the wiring harness, and then a power tool was brought into play, for the first time, to tighten the engine nuts.

Here the second man took over, to add the rear mudguard and carrier assembly. At this point the machine was inverted for the engine bolts to receive their final tightening. On went the head bearings, snuggling in their nest of grease, to their place on the front forks, which were in turn fixed to the frame. And, looking more like a moped, NN5500 passed to the third man of the team.

Swiftly he tucked the rear-lamp lead into its conduit, added the junction box and connected the various wires to it. The chain was threaded over the sprocket

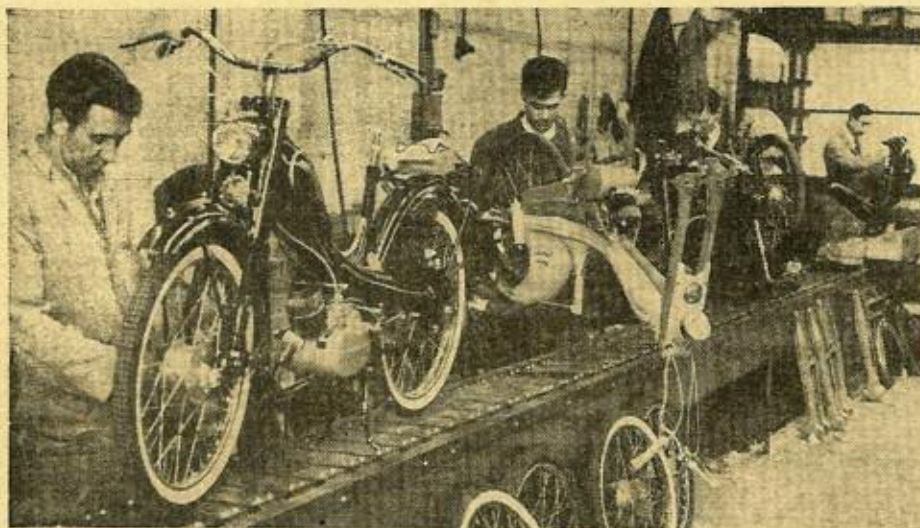
and the rear wheel fitted, a gauge being used to align it. The rear stand and its spring followed in quick succession, and all nuts were tightened where required before the front mudguard and wheel took their places.

Now it was the turn of the fourth man, who, in the interim, had been busy on pre-assembly work. Deftly he fitted the handlebars and threaded the cables into place. The headlamp cowl followed, the wiring was finished, and the fifth man of the team took over to complete the building of the machine.

A set of tools was thrust into the toolbox; the seat pillar, rear-brake rod, saddle, gear control, side- and under-shields added in that order. And there stood a complete "Nippy," its job-card filled in, ready to pass to the test shop



All done by colours? Assembling the switches that light the way and sound the warning.

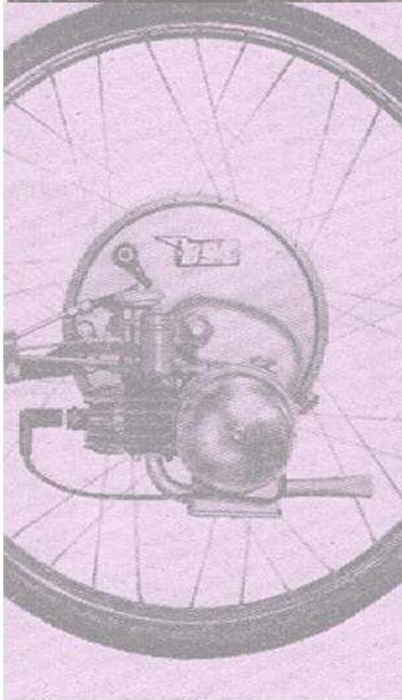


In the main assembly shop. "Nippys" start as a frame (at the right) and grow rapidly under these skilled hands.

This is an obligatory visit for every moped. They are tested on rollers, and in the factory grounds, before being passed as fit to proceed to the packing section for delivery to home or overseas markets.

A large percentage of the concern's "Nippys" produced go overseas. Malaya and the Central Americas are amongst the best of Ashford's customers abroad . . . attracted by the excellence of finish which only the loving hands of skilled men can give, and which is one of the hall-marks of Norman production. But besides that, this Tube Investments group concern offers a superlative 48-hour spares service which is the envy of the trade. Their investment in the moped, though modest by standards abroad, has shown that this most recent of personal transport developments not only has a future . . . it has a present as well!

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